

Patent Claims

- 5 1. Use of pale or transparent particulate semiconductor materials or particulate substrates coated with pale or transparent semiconductor materials for curing and/or drying and/or for increasing the thermal conductivity of surface-coating layers and printing inks.
- 10 2. Use of semiconductor materials according to Claim 1, characterised in that the semiconductor materials are built up homogeneously from pale or transparent semiconductor materials or are applied as coating to a particulate substrate.
- 15 3. Use of semiconductor materials according to Claim 1 or 2, characterised in that the particulate semiconductor materials and particulate substrates are spherical, flake-form or needle-shaped materials or substrates.
- 20 4. Use of semiconductor materials according to one of Claims 1 to 3, characterised in that the semiconductor material is built up oxidically or sulfidically.
- 25 5. Use of semiconductor materials according to one of Claims 1 to 4, characterised in that the semiconductor material is built up on the basis of indium oxide, antimony oxide, tin oxide, zinc oxide, zinc sulfide, tin sulfide or is a mixture of the said materials.
- 30 6. Use of semiconductor materials according to Claim 5, characterised in that the mixture is indium-tin oxide (ITO).
- 35 7. Use of semiconductor materials according to one of Claims 1 to 6, characterised in that the substrate is selected from the group consisting of mica flakes, SiO₂ flakes, Al₂O₃ flakes, glass flakes, aluminium flakes, BiOCl flakes, SiO₂ spheres, glass spheres, hollow glass spheres, TiO₂ spheres, polymer spheres, TiO₂ needles or mixtures thereof.

8. Use of semiconductor materials according to one of Claims 1 to 7, characterised in that the semiconductor materials are doped.
- 5 9. Use of semiconductor materials according to one of Claims 1 to 8, characterised in that the semiconductor has an amorphous, crystalline or microcrystalline structure.
- 10 10. Formulations, characterised in that they comprise one or more pale or transparent particulate semiconductor materials or particulate substrates coated with pale or transparent semiconductor materials as curing and/or drying additives.
- 15 11. Formulations according to Claim 10, characterised in that they are surface coatings or printing inks comprising semiconductor materials.

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